

7.0 GEOTECHNICAL OVERVIEW

Based on comments received from the Kentucky Geological Survey, there are several geological features within the study area. It should be noted that the study area might encounter karst features such as sinkholes and caves, as well as shaly units prone to landslides, unconsolidated sediments in drainage areas, and terrace deposits on hilltops along the Kentucky River. It is also possible that faulted areas will be encountered. A map is included along with the Geologic Survey's response in **Appendix D**. Drainage problems could occur if water seeps along the faulted area. Mineralization could also be found within the faulted and fractured areas, as well as contrasting rock types on opposite sides of faulted areas. Rocks suitable for construction stone are possible within the study area.

For additional information about geologic features / concerns, refer to the letter provided by the Kentucky Geological Survey attached in **Appendix D** as part of the public involvement / agency coordination for this study.

8.0 PUBLIC INVOLVEMENT

The Public Involvement Program for the US 27 to I-75 Scoping Study was comprised of several key elements designed to encourage participation and obtain feedback from the stakeholders in Fayette, Jessamine and Madison Counties. The key aspects include: meetings with local elected officials, formation and regular meetings of a project work group (PWG), public meetings, and agency correspondence. The process and methods for public involvement are outlined in this chapter. The results and feedback from implementation of the Public Involvement Program are provided throughout the entire report, particularly in the development and evaluation of alternates. Copies of the public involvement meeting summaries are included in **Appendix E** for reference including summaries of the input received at the public meetings.

Locally Elected Officials and Other Stakeholders – Meetings were held with locally elected officials and other stakeholders from Fayette, Jessamine, and Madison Counties. Locally elected officials included County Judge Executives, Mayors, and other officials who represented or spoke for the jurisdiction or agency. Three meetings were held in each of the counties; Fayette, Jessamine and Madison. Brief summaries of each meeting are given below, and meeting minutes are provided in **Appendix E**.

- Fayette County – A meeting with Don Kelly, the Public Works Director for the Lexington Fayette Urban County Government (LFUCG) was held on August 17, 2007. Mr. Kelly is knowledgeable about the project and the transportation conditions of south Lexington. He is supportive of a study, but will withhold judgment on recommendations. He feels that a new roadway would relieve congestion from Man ‘O War Boulevard and New Circle Road.
- Jessamine County – A meeting with Neal Cassity, the Judge Executive of Jessamine County, Russ Meyer, the Mayor of Nicholasville, and Nancy Stone of the Jessamine County Chamber of Commerce was held on August 28, 2007. Judge Cassity, Mayor Meyer and Ms. Stone are all very knowledgeable about the project and the transportation conditions of the region. The Jessamine County Transportation Task Force, headed by Nancy Stone, was the agency that received the initial grant money to fund this project. This is an incredibly important project to the County.
- Madison County – A meeting with Connie Lawson, the Mayor of Richmond, and Kent Clark, the Judge Executive of Madison County was held on August 7, 2007. Ms. Lawson and Mr. Clark are both supportive of the proposed connector project. They feel that it is needed in order to relieve traffic on I-75 during a crash, construction, or other type of incident. It would also provide an alternate to the Clays Ferry Bridge, and would provide more direct access to the interstate system for Jessamine County residents and businesses. In addition, it would be beneficial for evacuation during an incident at the Bluegrass Army Depot.

Project Work Group Meetings – A Project Work Group (PWG) was developed to provide input on issues and concerns about the project at key decision points throughout the study. The PWG includes representatives from KYTC District 7 and Central Office Staff including – KYTC Planning, Pre-Construction, Environmental Analysis, representatives from the Lexington MPO, Bluegrass ADD, federal, state, and local resource agencies, local elected officials from Jessamine, Fayette and Madison Counties, chamber of commerce representatives, landowners, homeowners, and other representative citizens of Jessamine, Fayette and Madison Counties. A list of PWG members is included in **Appendix E** along with meeting minutes for all PWG meetings. Five meetings were held at major study milestones. Each of the meetings is described in more detail below.

- PWG Meeting #1 – The first PWG meeting was held on October 30, 2007 at the Bluegrass Area Development District conference room. This was a kick-off meeting with the purpose of convening the PWG, providing background information, and obtaining input on study issues and goals.
- PWG Meeting #2 – The purpose of the second PWG meeting, held on February 25, 2008, was to update the members on project progress to date including presenting the DRAFT project purpose and need, a summary of the comments received at the first public meeting, initial TransCad Model results of “test” corridors, and the initial fatal flaw screening and evaluation of the alternate corridors for the US 27 to I-75 Corridor Scoping Study. The PWG was shown what was done to narrow the 50 to 60 corridors drawn at the public meeting down to 18, and comments were received. The PWG agreed that a more detailed analysis needed to be performed for all 18 alternatives as well as the no-build before any remaining corridors could be eliminated.
- PWG Meeting #3 – The purpose of the third PWG meeting was to review the project purpose and need and narrow down the list of potential alternative corridors to the most promising based on the provided evaluation matrix. An evaluation matrix that examined each corridor with respect to system operations, traffic operations, natural environment, human environment and cost was presented. Based on these criteria, discussion amongst the PWG followed, and the set of 18 corridors was narrowed to 6, in addition to the no-build alternative.
- PWG Meeting #4 – The purpose of the fourth PWG meeting was to present the PWG with the Level 3 Analysis of the remaining six corridors and the no-build option, and to obtain feedback before the information was presented at the next public meeting. The analysis was discussed and it was decided what information would be best to present at the public meeting.
- PWG Meeting #5 – The purpose of the fifth PWG meeting was to discuss the results of the second public meeting with the PWG, as well as present to them the Project Development Team's preferred corridor. The PWG agreed on the preferred corridor and provided comments with respect to treatment of access, preference of a two versus four lane roadway, multi-use path considerations and tolling. This was the final PWG meeting, however the PWG was told they would be given the opportunity to review the draft report and provide comments.

Public Meetings – Two public meetings were held during the course of this study. The public meetings were held in a traditional open house style format. Key goals for these meetings were to determine if the public was in favor of the project, to gather input on the issues and concerns of the project, to propose alternate corridors and to help choose the best corridor. Each of these meetings is described in more detail below.

- **Public Meeting #1** – This meeting was held on November 20, 2007 in the cafeteria of the West Jessamine Middle School in Jessamine County. The purpose of the first public information meeting was to inform the public of the study, present the existing conditions documentation, gather input on the project issues and goals, determine if the public was for or against the project, and begin the process of alternate development. Five stations were set up around the cafeteria and were staffed with KYTC, Bluegrass ADD, Lexington MPO, PB, HDR, H. Powell and Company, and Third Rock personnel. The five stations included study background information, existing highway system conditions, existing environmental information, inputs on issues, goals and corridors, and written and oral recorded comments. A survey was given to each attendee when they signed in. In addition to the 144 surveys returned either at the meeting or afterwards, participants were also able to provide feedback by writing their issues and goals for the project on large sheets of paper provided, drawing corridors on large maps where they would like to see the road built, and by having their comments recorded by a court reporter. A summary of this informational event and the resulting survey information is provided in **Appendix E**.
- **Public Meeting #2** – The second public meeting was held on June 16, 2008 on the campus of Eastern Kentucky University in Richmond, Kentucky. The purpose of the meeting was to present to the public the work completed thus far including project purpose and need, identification / development of potential corridors, and the evaluation process. Through an iterative evaluation process, the number of potential corridors was narrowed down to six prior to this meeting. These six final corridors (along with the no-build option) were shown to the public to request feedback as to which should be the preferred alternative. Additional input was also requested as to the number of lanes, treatment of access, bicycle / pedestrian considerations, and tolling as a potential funding source. This open house was somewhat unique in that in order to encourage attendees to visit the individual project stations and fill out a comment form, three \$50 gas cards were given away. This was fairly successful as out of the 77 people who signed in at the meeting, 58 completed and returned a survey. A summary of this informational event and the resulting survey information is provided in **Appendix E**.

Agency Correspondence – An agency mailing was prepared during the initial stages of this study and sent to various local, state, and federal regulatory agencies, as well as elected officials, to obtain input in the study process. The list of respondents includes:

- The United States Department of Military Affairs
- Kentucky Airport Zoning Commission

- Kentucky Division of Forestry
- Kentucky Vehicle Enforcement
- University of Kentucky Geological Survey
- Kentucky Department for Environmental Protection Division for Air Quality
- Kentucky Department of Natural Resources Division of Conservation
- Kentucky Cabinet for Health and Family Services Facilities Management Division
- Kentucky Department of Fish and Wildlife Resources Commerce Cabinet
- Kentucky Transportation Cabinet Office of Special Programs
- City of Nicholasville
- Nicholasville Police Department
- Lexington Division of Police
- Nicholasville Mayor Russell Meyer
- Jessamine County Judge Executive
- Jessamine County Clerk Jessamine County EMS Chief
- Nicholasville Fire Department
- State Representative Robert R. Damron
- State Representative Bill Farmer
- State Senator Tom Buford
- Kentucky Division of Waste Management

A letter describing the project was sent to the above agencies and representatives, along with the website where they could find public meeting materials. Some agencies sent back letters, while others returned the survey forms used at the public meeting. From the letters received, several of the agencies listed above had concerns regarding the project.

- The Airport Zoning Commission stated that a permit from the state and the Federal Aviation Administration would be needed if any temporary or permanent structures exceed restrictions given in their response.
- The Kentucky Division of Forestry encouraged the inclusion of wildlife-friendly passage accommodations.
- The Division of Air Quality listed Kentucky Division for Air Quality Regulations that apply to the project, as well as requirements of the Clean Air Act. They also recommended investigating applicable local government regulations.
- The Kentucky Department for Environmental Protection Division for Air Quality response stated that the project must meet the conformity requirements of the Clean Air Act as amended and the transportation planning provision of Title 23 and Title 49 of United States Code.
- The Kentucky Geologic Survey stated that the study area would encounter several geologic features, such as:
 - Karst features (sinkholes and caves);
 - Shaly units that are highly susceptible to slumping when wet;
 - Unconsolidated sediments in drainage areas and terrace deposits on hilltops;

- Rock units that would be suitable as construction stone; and
- Faulted areas where water seepage along the faults could cause drainage problems, mineralization could be found in the faulted and fractured areas, and contrasting rock types could be found on opposite sides of the faulted areas.

The Geologic Survey said that the potential for an earthquake in the study area is very low.

- The Kentucky Department for Environmental Protection Division of Conservation identified an agricultural district in the northwest area of Madison County, and stated that impacts to this soil should be mitigated. Concerns of controlling erosion and sediments during and after earth disturbing activities were expressed, and it was suggested that best management practices (BMPs) be utilized to prevent non-point source water pollution. It was also requested that the study include the issue of loss of farmland.
- Based on comments provided by the Kentucky Department of Fish and Wildlife Resources Commerce Cabinet, the federally endangered gray bat, *Myotis grisescens*, and Indiana bat, *Myotis sodalists* are known to occur within close proximity to the project area. Any impact to trees during construction should be completed within a specific time frame to avoid any harm to the bats.
- Also from the Department of Fish and Wildlife Resources, impacts to streams should preferably be mitigated on site, however, if that is not possible, several Kentucky River tributaries were identified as stream restoration sites.
- The Kentucky Division of Waste Management received no comments from Hazardous Waste Permitting. There are also no Hazardous Waste Treatment Storage Sites. A list of superfund sites in the study area as well as a list of Underground Storage Tank sites were sent, and are included in **Appendix D**, along with the e-mail responses.

Based on the survey forms received from state representatives, senators and other public agencies, it seems that the majority of agencies and elected officials are in favor of a new connector road or do not see a compelling reason why one should not be pursued. Reasons that most people want the connector include reduced traffic congestion, improved connectivity, economic development, and improved safety.

A copy of the recipient list and responses can be found in **Appendix D** for reference.

Project Team Meetings – Several meetings were also held with the KYTC and the consultant team to discuss project issues including the PWG and public meetings (preparation and results), issues and goals, development of alternates, evaluation of alternates and a meeting to discuss project recommendations. The meeting minutes from these meetings are included in **Appendix E** for reference.